

## § 45.57

$$P_1 = P + A[(L/D) - (L/D_s)]$$

where  $P$  is a factor, which is a function of the length from table 1 and “A” is a coefficient, which is a function of length ( $L$ ), from table 2;  $L/D$  is the ratio of the length ( $L$ ) to the depth for freeboard ( $D$ );  $L/D_s$  is the ratio of the length ( $L$ ) to a standard depth ( $D_s$ ) from table 3.

$D$  is not to be used as less than that which will give a ratio of  $L$  to  $D$  that is:

- (a) More than 15 when  $L=400$  feet or less, or
- (b) More than 21 when  $L=700$  feet or more, with the ratio for intermediate lengths being calculated proportionately.

(b) For ships 350 feet or more in length ( $L$ ), the coefficient “A” is zero and the formula is:

$$P_1 = P$$

where  $P$  is a factor, which is a function of length from table (1).

## § 45.57 Correction: Position of deckline.

(a) Where the depth to the upper edge of the deckline is greater or less than  $D$ , the difference between the depths must be added to or deducted from the freeboard.

(b) When the Commandant or the approved assigning authority approves a location for the deckline that is above or below the freeboard deck, the minimum summer freeboard must be corrected by—

(1) Adding the difference between the depth and  $D$  if the depth is greater than  $D$ ; and

(2) Subtracting the difference between the depth and  $D$ , if the depth is less than  $D$ .

(c) Except for the adjustment allowed in paragraph (b) of this section, no freeboard of less than 2 in. may be assigned.

## § 45.58 Correction: Short superstructure.

The minimum freeboard in summer for a type B vessel that is 79 ft. or more but less than 500 ft. in length and has enclosed superstructures with an effective length of 25 percent or less of the length of the vessel must be increased by—

$$0.03 (500 - L) (0.25 - E/L) \text{ inches}$$

where:

( $L$ )=length of vessel in feet;

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( $E$ )=effective length of superstructure in feet as defined in § 45.59.

## § 45.59 Definitions for superstructure corrections.

For the purpose of §§ 45.58 through 45.61—

(a) The standard height of a superstructure ( $H^s$ ) other than a raised quarter deck and the standard height of a trunk ( $H^*$ ) is determined by the formula:

$$H^s = [6.0 + (L/300)] \text{ ft}$$

(b) The length of superstructure ( $S$ ) is the length of those parts of the superstructure which extends to the sides of the vessel and that lie within the length ( $L$ ).

(c) The effective length ( $E$ ) of a trunk is its length in the ratio of its mean breadth to  $B$ .

(d) The effective length ( $E$ ) of an enclosed superstructure of standard height or greater is its length “ $S$ ”.

(e) Where the height of an enclosed superstructure or trunk is less than the standard height ( $H_s$ ), the effective length ( $E$ ) is its length reduced in the ratio of its height to  $H_s$ .

(f) The effective length ( $E$ ) of a raised quarter deck of  $\frac{2}{3} H_s$  or greater that has no openings in the front bulkhead is its length up to a maximum of  $0.6L$ .

(g) The effective length ( $E$ ) of a raised quarter deck of less than  $\frac{2}{3} H_s$  or that does not have an intact front bulkhead is its length reduced by the ratio of its height to  $H_s$ .

TABLE 12(1)

TABLES OF P VALUES

Length of Ship (feet)	Value of P
80 .....	0.1100
90 .....	0.1136
100 .....	0.1172
110 .....	0.1208
120 .....	0.1244
130 .....	0.1281
140 .....	0.1318
150 .....	0.1355
160 .....	0.1393
170 .....	0.1430
180 .....	0.1468
190 .....	0.1506
200 .....	0.1545
210 .....	0.1583
220 .....	0.1622
230 .....	0.1661
240 .....	0.1700
250 .....	0.1740
260 .....	0.1780